# UNITED STATES PATENT AND TRADEMARK OFFICE

 In re:
 Pu Zhou
 Confirmation No.: 8049

 Serial No.:
 10/645,764
 Examiner: C. Rodriguez

 Filing Date:
 August 20, 2003
 Group Art Unit: 3763

Docket No.: 1001.1688101 Customer No.: 28075

For: CATHETER WITH THIN-WALLED BRAID

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Date: 10/12/06

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

### CERTIFICATE FOR ELECTRONIC TRANSMISSION:

The undersigned hereby certifies that this paper or papers, as described herein, are being electronically transmitted to the U.S. Patent and Trademark Office on this 12th day of October 2006.

By Kattley & Bockley
Kathleen L. Bockley

Dear Sir

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this Request.

This Request is being filed with a Notice of Appeal.

The review is requested for the reasons stated on the attached four sheets of arguments.

This Request is signed by an attorney or agent of record.

Respectfully submitted,

Pu Zhou

By Kis Attorney

David M. Crompton, Reg. No. 36,772 CROMPTON, SEAGER & TUFFE, LLC

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Attachment: Four Sheets of Pre-Appeal Brief Request Attachment

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By Kattley L. Bockley
Kathleen L. Bockley

Dear Sir

Appellant has carefully reviewed the Final Office Action dated June 13, 2006 and the Advisory Action dated August 18, 2006. Currently, claims 1, 2, 6-8, 10, 12, 17 and 18 are pending in this application and claims 1, 2, 6, 8, 10, 12 and 17 stand rejected. Appellant hereby requests a pre-appeal conference and files this pre-appeal brief concurrently with a Notice of Appeal.

Claims 1, 2, 6, 8, 10, 12 and 17 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chien et al. (U.S. Patent No. 5,891,114). However, Chien et al. fail to disclose each and every claim element. For example, Chien et al. fail to disclose "a catheter braid formed from at least two continuous wires woven together...wherein...for each continuous wire, the distal cross-sectional area of said continuous wire is less than the proximal cross-sectional area of each wire" as claimed in claim 1.

In arguing that Chien et al. anticipate the claimed invention, the Examiner states at paragraph 2 in the June 13, 2006 Office Action that:

Chien discloses a catheter (Figure 8) where the braid wire cross-sectional area at the distal section is less than the proximal wire cross-sectional area. The braid

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wires can be continuous throughout the proximal and distal section (col. 10, lines 34-44; Figure 7, col. 13, lines 55-57, and col. 14, lines 55-65).

The first statement, taken alone, is true. However, Chien et al. do not explicitly address the issue of whether the braid wire is continuous across the proximal and distal sections in the embodiment of Figure 8. The second statement is therefore inaccurate. Chien et al. do not teach that the braid wires of the Figure 8 embodiment are continuous throughout the proximal and distal sections.

Chien et al. make two pertinent statements when describing the embodiment of Figure 8, namely that the Figure 8 embodiment is "similar to that shown in FIG. 7" and that the main difference is that "the distal woven braid (282) is comprised of a wire rather than the ribbon braid (262) shown in FIG. 7." (Column 14, lines 56-60.)

The embodiment of Figure 7 is described as having a "proximal woven ribbon braid (266)" and a "distal ribbon braid (262)." (Column 12, lines 20-23.) Thus the difference between the Figure 8 embodiment and the Figure 7 embodiment is that the distal section of the Figure 8 embodiment has a wire braid rather than a ribbon braid. Chien et al. describe ribbon as follows: "By the term 'ribbon,' we intend to include elongated shapes, the cross-section of which are not square or round." In contrast, Chien et al. describe wires as round: "Highly preferred are braids comprised of wires of stainless steel having a diameter between 0.5 mils to 3 mils." See column 14, lines 62-65. See also column 12, lines 62-66. The Examiner is therefore arguing that Chien et al. teach a continuous wire whose distal cross-section is less than its proximal cross-section and where the distal cross-section is round while the proximal cross-section is not round.

The confusion, Appellant believes, begins with the description of how the Figure 7 embodiment may be made: "more distal ribbon braid (262) may either be an extension of ribbon braid (266) with some of its elements removed or distal ribbon braid (262) may be an independent braid of another material placed distally of woven ribbon braid (266)." See column 12, lines 24-28. In the first of these two manufacturing methods, of course, some of the ribbons may be continuous throughout the proximal and distal sections.

This, however, is describing the Figure 7 embodiment. The brief (single paragraph) description of Figure 8 teaches only structural elements and not manufacturing methods and, as mentioned above, is silent as to whether the braid wire is continuous across the proximal and distal sections.

The fundamental principal of anticipation under 35 U.S.C. § 102 is that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

As Appellant has tried to make clear above, the description of the Figure 8 embodiment is silent as to whether the wire is continuous across the proximal and distal sections. The element of "a catheter braid formed from at least two continuous wires woven togetheter...wherein...for each continuous wire, the distal cross-sectional area of said continuous wire is less than the proximal cross-sectional area of each wire" as claimed in claim 1 is therefore not expressly found in the Chien et al. reference.

The questions now becomes whether the above element is inherently described in the prior art reference. As set forth in MPEP § 2112 "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Therefore, if there is any alternative construction of the Figure 8 embodiment, the claimed element is not inherent.

The Figure 8 embodiment could be (and in Appellant's view almost certainly is) made by abutting a distal wire braid to an independent proximal ribbon braid. Because the Figure 8 embodiment can be made by this method, which has a non-anticipatory structure, the claimed element of "a catheter braid formed from at least two continuous wires woven togetheter...wherein...for each continuous wire, the distal cross-sectional area of said continuous wire is less than the proximal cross-sectional area of each wire" is not inherently described in Chien et al.

Because the claimed element is not explicitly set for or inherently described in Chien et al., Chien et al., Chien et al. do not anticipate the claim.

The above should be sufficient to show why Chien et al. do not anticipate the pending claims. To be perfectly clear and because this is the apparent basis for the confusion, Appellant feels that it is worthwhile to discuss the construction method of the Figure 7 embodiment where the distal ribbon braid is an extension of the proximal ribbon braid with some of its elements

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removed and why that construction method cannot result in the embodiment of Figure 8. The explanation can be briefly sketched out as follows. Chien et al. do not disclose any ribbons whose cross-sectional areas (or shapes) vary along its length. The process of removing braid elements will therefore not result in a braid having a continuous wire where the distal cross-sectional area is less than the proximal cross-sectional area. It will result in a distal braid section with fewer elements, but whose elements have the same cross-sectional area throughout. Only if one started out with a ribbon whose cross-sectional area varies could one produce a catheter braid as claimed. Such a ribbon is not disclosed. Chien et al. discuss ribbons of fixed cross-sectional area, saying "[t]hey should have an aspect ratio of at least 0.5 (thickness/width)" and that "[c]urrently available ribbons include sizes of 0.75 mil×4 mil, 1 mil×3 mil, 1 mil×4 mil, 2 mil×6 mil, and 2 mil×8 m." See column 12, line 65 through column 13, line 4. This is not language used when describing a ribbon of varying cross-section. Because Chien et al do not disclose any ribbons that can be used to make the embodiment of Figure 8 using the construction method of removing some elements from a ribbon braid, one has further confirmation that Chien et al. do not anticipate the claimed invention.

For at least the reasons mentioned above, all of the pending claims are allowable over the cited prior art. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted.

Pu Zhọi

By his attorney

David M. Crompton, Reg. No. 36/772 CROMPTON, SEAGER & TUFFE, LLC

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